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CONTENTS.

CLINICS.

CLINICAL LECTURE.

Clinical Lecture on the Avoidance of Amputation in Certain Cases of Severe Injury . 81

MEDICAL NEWS.

Domestic Intelligence.—American Medical Association 84
Missouri State Medical Association . . 85
St. Louis Medical College 85
Chicago Medical College 85
Pennsylvania College of Dental Surgery . 85
A New and Improved Operating Theatre . 85
Champagne from Petroleum 85
A Sensible Legislature 85

Foreign Intelligence.—Death from Chloroform 85
Cholera Fungus 85
Inoculation of Tubercle 86
Origin of Cancer 86
Twisting Ends of Arteries 88
Difficulty in the Diagnosis of Insanity . . 88
Protoxide of Nitrogen as an Anæsthetic . 88
Fatal Hemorrhage after Extraction of a Tooth 90
Cause of the Inability of Salt-water Fish to Live in Fresh Water, and of Fresh-water Fish to Live in Salt Water 90
Simple Synthesis of Urea 91
Treatment of Disease by Faith and Prayer, instead of Medicine 91
A Popular Fallacy 92
Madame Lachapelle 92
Insalubrity of Cast Iron Stoves . . . 93
Venom of Toads 94
Scientific Schools in France 94
Consumption of Tobacco in France . . 94
Sir J. Y. Simpson on the Pyramids . . 95
What is Syphilization 95
Accidents 95
New Medical Journal 95
Safety of Dr. Livingstone 95
M. Nélaton 95
Sir James Clark 95
Obituary Record 95

HUDSON ON FEVER. 16 PAGES.

CLINICS.

CLINICAL LECTURE.

Clinical Lecture on the Avoidance of Amputation in Certain Cases of Severe Injury. By JONATHAN HUTCHINSON, F. R. C. S., Surgeon to the London Hospital and Lecturer on Surgery.

GENTLEMEN: Cases in which important operations have been recommended and not performed, are always of great importance in their teaching, as regards the management of others which may occur in the future. This remark especially applies to those in which the amputation of a limb or the excision of a large joint has been the measure in prospect. To some of these I now invite your attention.

In November, 1865, we admitted a young man named Piggott, a railway porter, who had had his right foot crushed by the fall of a piece of timber. Both tibia and fibula were fractured, the tibia being much comminuted. Synovia escaped freely from a wound on the outer side of the ankle-joint. There were several other wounds, and the soft parts were very much bruised. The foot was somewhat twisted, but the displacement was not very great. You will see then that we had to deal with one of the most serious forms of compound fracture of the leg, that, namely, in which the ankle-joint is also involved. We decided, however, considering the man's youth and his good health, to attempt to save the limb. The wounds were covered with lint soaked in blood, and with collodion applied over it.

Inflammation of the cellular tissue of the limb and of the ankle-joint followed. We were obliged to remove the dressings within a day or two, and during the next two months we had to encounter that condition of diffuse suppuration of all the parts involved, which so often either necessitates a

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secondary amputation or causes the patient's death. Several times during this period the propriety of amputation was discussed, and that measure was almost decided upon. On one occasion in consultation with Mr. Adams, we both agreed that it would be necessary, but decided to wait a few days in the hope that the man might be in a more favourable condition. Meanwhile, we continued the usual measures of treatment, free incisions wherever abscesses presented themselves, a poultice to the part, and as good a diet as the man could take. Mr. Colquhoun, the dresser of the case, was indefatigable in his attention to it, and to his care I have no doubt that the ultimate result was to a large extent due.

By slow degrees the condition of things improved. The accident was on Nov. 7th, and a month later he was able to eat well, and was in every respect gaining ground. His pulse was still, however, upwards of 120. During the early part of January I removed several considerable fragments of bone, which had become loose, and on March 15th, another large portion was taken away. On the 12th of April, just four months after his admission, he was able to leave the hospital and return to the country. A year later he came to me to show his leg, and I will now give you the particulars of his present condition.

April 2, 1867.—*Present condition.*—He is in good health and with a thick-heeled boot walks fairly. He can walk two miles or more at a time, and has no pain in the leg. It is soundly healed and has been so for some months. There is some deformity, the foot and lower portions of the bones of the leg being displaced outwards, and the lower end of the upper fragment of the tibia projecting beneath the skin. His heel is about an inch and a half from the ground. I think the ankle-joint is stiff, but he has some motion in the tarsus, which might easily be supposed to be at the joint itself.

Not only is the limb now very useful, but there is every reason to believe that it will improve as time passes.

Our next case for mention is that of a man whom most of you will remember in one of the attic wards about a year ago. He was long under treatment, and at one time his arm looked almost hopeless as regards recovery.

Joseph Shephard, aged 51, a labourer from Enfield, was admitted on the 6th of November, 1865, having had his right arm crushed under the wheel of a loaded wagon. The humerus was broken at its middle, and the soft parts were severely lacerated and contused. General inflammation of the limb followed, with extensive sloughing of the skin. Splints were out of the question, and we had to manage the fracture as well as we could, suspending the limb from a cradle. The upper fragment was much displaced outwards, and to secure apposition the limb had to be carried out at right angles with the body. Mr. Colquhoun, the dresser of the case, paid it great attention. For some time I was afraid that we should be compelled to amputate, and next when things had improved somewhat there seemed much reason to fear non-union. After the bones stiffened somewhat, erysipelas occurred, and they became quite loose again. The poor fellow was confined to bed from November 6th to May 6th, and when, at the latter date, we sent him home he was but just able to get up. The fracture was not firm, and the wounds had scarcely healed.

A year later I wrote to him to come up for inspection, and was much pleased to find him in good health, and with a very useful arm. The fracture is now quite firm, and there is but little overlapping. In consequence of the extensive sloughing of cellular tissue, suppuration, &c., the muscles are glued down, and their motions much impeded, but the limb is still very useful to him.

Of late years I have performed exceedingly few amputations for injuries, and only when the indications have been such as to leave not the slightest doubt. The difference in risk to life between a compound fracture of the severest kind and a primary amputation seems to be very little indeed. I do not think that you diminish the liability to pyæmia at all by amputating, and this is by far the chief danger in both. Nor has the result of my experience on the whole been favourable to the performance of secondary amputations when resorted to because the patient was doing badly. I have done many such, in the hope that removal of the source of irritation would enable the system to rally, but very rarely have I met with a good result. On the other hand, of the cases which seemed hopeless, but in which for one reason or another I resolved not to amputate, every now and then one

has unexpectedly pulled through. My impression is then that we ought to regard the state of the patient's health but little in deciding on this point. If he is bearing a compound fracture badly, you may infer that he will be very likely to succumb if the shock of an amputation be added. Sometimes you hear remarks made as if the loss of the limb were the only question, and as if, would the patient consent to this, the saving of his life were a certainty. In practice, however, the cases are very few in which it is really a question of life or limb, much more usually life and limb stand or fall together. One feels inclined when looking at a compound fracture which is doing badly to reason respecting amputation, much as Macbeth did as to the murder, and to say, taking a slight liberty with the text:—

"If he were well when 't were done, then 't were well
It were done quickly: If," &c. &c.

In thus urging you to decline for the most part the performance of secondary amputation, and to let your patient take his chance with his limb on, I do not include cases of traumatic gangrene. In most of these it is necessary to amputate as soon as the real nature of the process is clearly shown. Nor do I wish to be boastful as to the limbs we save in these "triumphs of conservative surgery." Very often the limb is so much damaged as to be of but little use, and now and then the patient may request its removal after he has recovered, and when the final result as regards both limb and life is evident. Still in all these life has been saved, and, in most of them, the limb is a source of satisfaction, and of some degree of use.

If, then, you ask me to summarize the principal points in which the impressions I have obtained from experience differ from those with which I began the practice of surgery, I would say briefly: 1st. That I have come to think less highly of amputation as a means of saving the patient's system from irritation and exhaustion. When I have to decide as to a primary amputation I think more of the possibility of local reparation, and much less of what may ensue to the patient's system during that repair. If it is manifest that the limb can never be repaired, cut it off at once, but if there is a bare chance, then leave it on without thinking much of the effect of the suppuration on the patient's strength. A compound fracture is very dangerous, but a primary amputation of a large limb is scarcely less so. 2dly. As to secondary amputations I would adopt nearly the same rule, that is, to estimate the local conditions, and to almost disregard the constitutional ones. If the limb has become absolutely hopeless, remove it, carefully selecting the proper time, and the later in reason usually the better. If, however, the limb is not hopeless, and the patient's constitutional symptoms are those which have led you to think of relieving him by amputation from "the source of exhaustion and irritation," then resist the temptation. Under such circumstances your patients are in the utmost danger whatever you do, but I think that in the long run they will do a little worse if you amputate than if you decline to. I speak of course only of the general rule. I know that there are exceptions, such, for instance, as when in addition to the original fracture, a large joint has recently become involved, and threatens to add its quota to the general disturbance. 3dly. As to the time for secondary amputations. Wait till suppuration is fully established, and the inflammatory fever has subsided. When this is the case, when the wound is granulating, and the patient eating well, you may amputate with great safety. It is astonishing what patients will bear in the way of suppuration from large wounds, provided no specific pyæmia has set in. Indeed, if once free suppuration has been established without the occurrence of rigors or other pyæmic symptoms, it is very rare for the patient to sink, however hopeless may be the local condition as regards final repair. A good example of this we recently had in the case of an old woman (upwards of 70), whose left arm had been so extensively injured that the skin of almost the whole extremity was destroyed. She remained for weeks exceedingly low, with dry tongue and quick pulse. The arm was clearly beyond possibility of reparation. At length the wound granulated, and she began to improve and to take food well. Convinced now from her own inspection of her limb that it could never heal, she at length reluctantly consented to amputation. This I did just below the shoulder-joint, and she recovered quickly. Had the operation been done earlier, it is my conviction that she would have died. A few months ago I saw a young gentleman at the Reed-

ham Orphans' Home, who had had his left foot crushed in the cogged wheel of a steam engine. Dr. Rose, with whom I had attended him, had been convinced from the first that the limb could not be saved. The ankle-joint was opened, the astragalus broken, the tarsal epiphysis of the tibia torn off, besides most extensive damage to the soft parts. Four days had elapsed from the date of the accident when I first saw him. He was feverish, and had a quick pulse, and the wound was scarcely beginning to discharge. I advised to wait, and he waited ten days longer. Suppuration was then profuse, and the wound very large, the tendo-Achillis and a strip of skin were the only structures which remained entire. But in spite of the discharge the boy's state had much improved, and we now amputated with, I believe, very much less risk than would have been incurred at any previous time. He did well. Two more cases, and I have done. One of them is an unsuccessful one, but I shall still in it try to justify the line of practice I pursued. One evening, about a year ago, an elderly man, very drunk, was carried in, who had been knocked down in the street, and had the wheel of a cart over his right shoulder. It did not look to be much damaged, but on examination we found the clavicle broken, and the scapula comminuted, whilst the arm was dragged so far away from the side that the fragments of the clavicle did not touch. The only wound of the skin was a hole large enough to admit two fingers in the middle of the axilla. Having passed my finger into this, I found that it entered a very large cavity, that the great pectoral muscle was torn across, and that the axillary artery suddenly ceased to pulsate about the middle of its course. There was no hemorrhage going on, and I believe there had been but little. The limb was cool. Having diagnosed laceration of the axillary artery in addition to the other injuries, I believe that my house-surgeon and dressers were all of opinion that primary amputation at the shoulder-joint was the proper measure. I preferred, however, to try to save the limb, inasmuch as no one of the lesions was necessarily destructive to its integrity, and that the whole combined might perhaps prove quite as little serious to the patient's chance of recovery as an amputation which must remove not only the arm, but the entire shoulder as well. The laceration of the artery, although it endangered did not necessitate gangrene of the limb. We had the limb wrapped in cotton-wool, and placed close to the trunk. With extreme rapidity the whole of the damaged member passed into gangrene, and the man died on the third day. You will observe that he was a drunken man, of unsound constitution. Now, although the result of trying to save was unfortunate in this case, I am very doubtful whether amputation would have done any better, or, which is the better way of putting it, whether if two half-dozens of parallel cases were treated, the one set by amputation, and the other without, the balance would not be on the side of the latter.

My last case is one still in the wards. A dissolute woman, pale, stout, and flabby, whilst drunk, fell out of a window, and was afterwards brought here with a severe compound fracture of both bones of the right leg in the lower third. The skin was most extensively torn, the laceration almost meeting in front. The bones were comminuted, and the muscles contused. She was in a very bad state for an operation, having lost much blood, and being collapsed, in addition to intoxication. I decided to venture to try to save it, and taking advantage of the fact that the wound surrounded the back of the limb, I put it up at once in plaster of Paris, leaving the wound exposed. We kept the plaster of Paris on for some six weeks, the limb being swung. Contrary, I believe, to the expectations of all, the woman rallied slowly, and improved in health. The fracture is now united, although the wound is not wholly healed. In this case, it is my impression that primary amputation instead of increasing would have diminished her chance.—*Med. Press and Circular*, April 8th, 1868.

MEDICAL NEWS.

DOMESTIC INTELLIGENCE.

American Medical Association.— The Association held its nineteenth annual meeting in Washington, D. C., on the 5th, 6th, 7th, and 8th of May. The usual number of reports and essays were read and some other business transacted, a summary of which we hope to lay before our readers in our next number. Dr. Wm. O. Baldwin, of Montgomery, Ala., was elected president for the ensuing year, and it was decided to

hold the next annual meeting in the city of New Orleans, La.

Missouri State Medical Association.—This Society met in St. Louis on the 2d of April, effected a reorganization, and adopted a constitution and by-laws. A number of papers were read by the members.

St. Louis Medical College.—At the annual commencement on the 2d of March last, the degree of M. D. was conferred on 46 candidates.

Chicago Medical College.—At the annual commencement on the third of March last the degree of M. D. was conferred on 45 candidates.

Pennsylvania College of Dental Surgery.—At the annual commencement of this school, February 29th, 1868, the degree of D. D. S. was conferred on 31 candidates. In the Demonstrator's report it was stated that 3968 patients were attended to at the Clinic, 2759 operations were performed for different forms of dental disease, and 157 patients were supplied with artificial dentures.

A New and Improved Operating Theatre has been erected during the past year by the Trustees of the Massachusetts General Hospital, calculated to accommodate nearly four hundred persons, at an expense of fifty thousand dollars.

Champagne from Petroleum.—It is no longer a secret of the chemist's laboratory that clear golden syrups can be made from starch and sulphuric acid; that delicious wines and brandies can be made from beet-root; that a barrel of peanuts can be transformed into excellent coffee; that lard can absorb an enormous quantity of water in certain conditions; that, in fact, there seems no limit to the adulterations that an intelligent and dishonest chemist can practise upon his fellow men. All these marvels of chemical science have in these latter days become degraded into mere tricks of trade, and their chief beauty is in their capacity to enable unscrupulous dealers to lighten the pockets and destroy the stomachs of the confiding and consuming public. Concerning the article of champagne, a writer in the *Cincinnati Journal of Commerce* tells us that it is made from a thousand different substances—even from refined petroleum. Yes, from the fiery benzole a sparkling, bubbling, foaming champagne can be produced which will delight the eye, tickle the palate, gladden the heart momentarily—but quicken our paces toward the graveyard. This is a new use for petroleum, which those who have been experimenting with it as an agency for generating steam have little dreamed of. Who can say that the Pennsylvania oil territory, now considered mostly worthless, may not some day be regenerated into the great champagne-producing country of the world?—*Brit. Med. Journal*, April 11, 1868.

A Sensible Legislature.—The legislature of Wisconsin is said to have passed a liberal law legalizing dissections, and also to prevent quacks from giving testimony in court on medical matters and from collecting fees. We commend this to the consideration of the *solons* of the Michigan legislature.

FOREIGN INTELLIGENCE.

Death from Chloroform.—An inquest was lately held at Liverpool on the body of Charles Rollason, 46 years of age, mate of the ship *Countess of Sefton*. Deceased, being unwell, went to the Northern Hospital, where chloroform was administered by Mr. Frederick Lowndes, in the presence of Drs. Bradley and Henry Lowndes. As soon as the deceased became fully insensible it was noticed that his breathing had stopped. The usual remedies were applied, but without avail. Dr. Bradley stated that the amount of chloroform administered was less than usual, as he had examined the deceased, and suspected that his heart was fatty. A *post-mortem* examination showed that the deceased died of syncope. The immediate cause of death was the administration of chloroform. Verdict, "Died under the influence of chloroform rightly and skilfully administered."—*British Medical Journ.*, May 9, 1868.

Cholera Fungus.—Amongst other things brought before the Pathological Society at its last meeting was a report by Dr. Sanderson and Mr. Hulke on Thomé's specimen of the cholera fungus. The growth, which was taken from vomited and alvine matter, had been cultivated for seven days on a

lemon. It consisted of spheroidal corpuscles $\frac{1}{1500}$ of an inch in diameter, cylindrical bodies $\frac{1}{1500}$ in. long and $\frac{1}{3000}$ in. wide, and mycelial filaments, an early stage of some higher form. The interesting feature about the report is the conclusion that the spheroidal bodies, identical with the micrococci of Hallier, are produced in the cavities of the cyst-like bodies described by Dr. Budd in 1849. Indeed, Hallier confirms the truth of Dr. Budd's observations. Hallier believes Thomé's fungus to be analogous to the oidium lactis of Fresenius, of which penicillium and achyla are varieties. Hence the starting-point of the cholera fungus is the cyst-like body of Budd; the final development, the penicillium.—*Lancet*, May 2, 1868.

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Inoculation of Tubercle.—Tuesday evening at the Pathological Society was signalized by one of the most valuable communications to which we have ever listened, made by Dr. Burdon Sanderson, and giving an account of the results of his experiments conducted during many months past on the inoculability of tubercle. Our readers will probably remember that we gave them an account of what had been done in this way some months ago, but since that time several important advances have been made. Even then it had been proved that substances other than tubercle had been found capable of giving rise to caseous matter in the lungs and other organs; but since that date Lebert has distinctly shown that such deposits can be produced by inorganic substances introduced beneath the skins of rodent animals. Now, Dr. Burdon Sanderson has gone a step further, and shown that simple mechanical irritation—such as that of a seton—is capable of producing similar effects. To give rise to internal deposits of a tuberculous kind in this way, it is necessary that the irritation be not too strong, otherwise the animal might die too soon; nor too weak, for it is necessary that it should last about a week. To produce the peculiar deposits, it is in all cases necessary that a certain amount of local induration and suppuration should take place at the spot where the irritation has been induced, which in turn are followed by secondary abscesses and indurations in their neighbourhood. In the walls of these abscesses may be traced all varieties of structures, from the spherical corpuscles of the pyogenic membrane to the fibres of the subcutaneous connective tissue. Bands of induration run between the abscesses. The surrounding lymphatics are next invaded. They become subject to a hyperplasia ending in caseous degeneration, with cretification or softening. Internally the organs specially affected are the lungs, liver, spleen, and peritoneum, the meninges being strangely excepted. In the lungs are formed the well-known iron-gray nodules, consisting partly of new deposit, partly of modified lung tissue, the whole being infiltrated with pigment. The liver, again, in the guinea-pig becomes enormously enlarged, but in shape resembling the cirrhosed organ, and contains two structures—the ordinary glandular textures around the hepatic veins, and a new deposit surrounding the portal vein and bile ducts. This consists of a structureless stroma, with loculi containing nuclei, and presenting an aspect identical with that of the lymphatic glands, so that Dr. B. Sanderson proposed for it the name of adenoid tissue. The spleen also becomes enlarged by the formation of deposits similar to those in the liver, whilst surrounding the walls of the larger mesenteric arteries are seen little deposits of the same character. It is impossible to overrate the value of Dr. Sanderson's painstaking inquiries. He is not a man to be led away by a desire for mere notoriety, and to propound his doctrines before they have been fully and carefully verified.—*Med. Times and Gazette*, April 11, 1868.

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Origin of Cancer.—The question of the origin of cancer has long been a disputed, and must always prove an interesting subject of inquiry. Virchow, with many recent foreign observers, as Weber, Förster, Rindfleisch, Billroth, and Klebs, considers that it originates in the multiplication and abnormal development of the connective-tissue corpuscles. In an essay contained in the current volume of *Virchow's Archives*, Professor Waldeyer, of Breslau, supports another view already partially developed by Cornil and others, to the effect that whilst in every case of cancer there is unquestionably an hypertrophy of the connective tissue, the disease essentially results from the proliferation of the epithelial cells lining the acini, follicles, or tubules of the organ affected. On examining a case of cancer, as

it appears in one of its most common sites, the breast or the stomach, it will soon be found that, variable as are the appearances presented to the naked eye, the microscopic characters of the tumour are nearly the same in all. In the case of the breast, the fat, as a general rule, has nearly disappeared, whilst the connective tissue between the lobuli is increased in quantity. The acini of the mammary gland, where they still retain their normal characters, are round on section, and are lined by sub-cylindrical, finely-granular nucleated cells, free from fat drops; but in the parts adjoining the scirrhous mass two remarkable features are presented—first, an hypertrophy of the *intra*-lobular connective tissue, in the meshes of which are contained a large number of small rounded cells; and secondly, an extraordinary development of epithelial cells in the interior of the acini themselves. The hypertrophy of the inter-lobular connective tissue precedes that of the intra-lobular, or, as Waldeyer terms it, the peri-acinous connective tissue and cell-growth; but contemporaneously with the development of the latter, the acini become elongated and dilated, present lateral projections, and are filled with large cells that clearly proceed from the pre-existing epithelial cells, which line their interior. Nearer the centre of the diseased mass the epithelial hypertrophy preponderates over the peri-acinous cell-growth. The basement membrane of the acini, at first very distinct, soon disappears, and with it the characteristic features of scirrhus become conspicuous. Irregular roundish masses of epithelial cells are now found to fill up the alveoli of the connective tissue constituting the so-called "carcinomatous bodies" of Waldeyer. No vessels ever develop in these accumulations, and the cells which compose them are distinguished from those of the surrounding connective tissue by their greater size, their larger nuclei, and the more granular character of the protoplasm in their interior. On the other hand, the cells of the peri-acinous connective tissue are small, round, often giving off fine and long processes, or presenting a decided lymphoid character. No intermediate forms are ever seen between these two kinds of cell-growth. Sometimes, however, instead of being contained in the acini, the epithelial cells appear to escape into the lymph-spaces of the gland, and may in this way be carried by the lymph-current to distant organs. Where the epithelial cell-growth is greatly in excess, medullary sarcoma is the result; where the hypertrophy of the connective tissue is out of all proportion to the epithelial proliferation, scirrhus or carcinoma fibrosum appears; and when both are developed in nearly equal proportions, we obtain the carcinoma simplex or fibroso-medullare. Regressive metamorphosis of the cells may frequently be observed, and fatty degeneration is, perhaps, the most common in those of the mammary gland. The characters of scirrhus, as it occurs in the stomach, are in all respects closely analogous to the description just given. Waldeyer has not had an opportunity of following the early stages of the development of cancer in the liver, but the deficiency is supplied by the observations of Naunyn, who has clearly shown that its origin is to be referred to the epithelial lining of the smallest bile-ducts. In the kidneys, near the cancerous masses, the interstitial connective tissue is found to be hypertrophied, the urinary tubules and Bowman's capsules enlarged and blocked up with large darkly-granular cells, whilst nearer the centre of the masses are only groups of epithelial cells which assume a lively red colour with carmine, a kind of alveolar network of connective tissue, and indications of tubercle in a state of fatty degeneration. Again, in cancer of the uterus, the seat of origin is invariably the glandular layer, and his observations on the epithelial cancer of the skin are quite in accordance with the above-mentioned views. The occurrence of carcinoma in the lymphatic glands, in the bones, the spleen, the vessels, and other organs, into which the two epithelial layers of the germinal vesicle never enter, were it true, would be a serious objection to Waldeyer's views; but, in the first place, though he has seen and examined many cases which had been diagnosed as carcinoma of these parts, they always turned out to be sarcoma, or pure connective-tissue tumours, and, for the most part, mixed forms of round and spindle-celled sarcoma. And, secondly, even supposing it to occur in these organs, it is possible to account for it by admitting the accidental entrance and passage of the cancer-cells along the blood-vessels or lymphatics till they arrive at a locality fit for their further development. He thinks the idea of a general dyscrasia, except in the above limited sense, wholly

unjustified by our present knowledge. Waldeyer remarks, with perfect truth, that the idea of being able to establish the malignity or innocency of a tumour from a mere microscopical examination must be given up; since the malignity of a tumour depends not alone on its anatomical structure, but upon very many other conditions —as its locality, and the general condition of the patient. In one instance a particular form of tumour shall remain perfectly innocent; in another, a tumour with the very same anatomical elements shall give every evidence of intense malignity.—*Lancet*, May 2, 1868.

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Twisting Ends of Arteries.—The practice of twisting the divided ends of the arteries, instead of applying ligatures, has lately been tried by Professor Humphry after all his operations, in Addenbrooke's Hospital, Cambridge, and with good result. There has been no subsequent bleeding in any case; and the wounds have, he thinks, on the whole, healed better than they would have done with the ligatures. The popliteal is among the arteries which have been thus secured, and the femoral, in two instances, after amputation in the thigh.—*Lancet*, May 9, 1868.

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Difficulty in the Diagnosis of Insanity.—M. Olivier gives an amusing illustration of this. A Brussels magistrate received letters in which it was stated that all the so-called insane shut up in a certain madhouse had not lost their reason, some of them being the victims of the most odious machinations. Another letter, containing the most touching appeal, induced the magistrate at once to repair to the asylum and insist upon an inspection of its inmates. The director took him to all of them one after another, without anything justifying the denunciations turning up. At last he arrived at the room of an old officer, who was said to have been mad for years. He received his visitor with all the ease of a man of the world, conversed with him with entire good sense, declaring that he was nowise mad, and that he was only so confined out of revenge. So clear were all his explanations that the magistrate, struck with their lucidity, promised to have his case at once looked into and justice done him. "You will save more than my life," replied the officer, accompanying his visitor through the garden to his carriage. The magistrate repeated his promises while placing his foot on the carriage step, his aldermanic proportions forcing him to bend down to enter the vehicle. All at once he felt a smart blow on that delicate part of the body which the shortness of the present garments exposes; and, turning suddenly round, he found the officer, laughing ready to burst, in the arms of two keepers. "Why did you strike me, sir?" he exclaimed. "Oh, I'll tell you," replied the lunatic, scarcely able to contain himself; "I can never see such a fine place without being seized with the wish to put my foot on it."—*Med. Times and Gazette*, April, 11, 1868, from *Presse Belge*.

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Protoxide of Nitrogen as an Anæsthetic.—Much interest has recently been excited in London by the introduction of protoxide of nitrogen as an anæsthetic agent, which has for the most part been due to the efforts of Dr. Thomas Evans, of Paris, who has recently made a visit to the metropolis for the express purpose of enlisting popular opinion on its behalf. We have hitherto abstained from saying anything on the subject, as the minds of the medical public might not be prepared to receive a perfectly unbiassed but somewhat adverse estimate of the value of the gas as an anæsthetic, but we now consider it our duty to lay certain facts before them which will tend to put matters in a true light. In the first place, then, the use of nitrous oxide as an anæsthetic is not a new discovery. When, owing to the brilliant series of discoveries made by Davy and others, pneumatic chemistry was in its greatest glory, the treatment of disease by the inhalation of different gases was a favourite scheme. Davy discovered the peculiar exhilarating effects of nitrous oxide, and the notion of using it as an anæsthetic was straightway formed. Again and again it was tried in this way at home and abroad, but repeated trials only seemed to render its inapplicability more decided, and we have heard little of it until news of its resuscitation, chiefly in dental practice, reached us from America. The success of the new attempt seemed to depend on the fact that no air was inhaled along with the gas, and that thus its peculiar stimulating effects were in great measure prevented. Preparatory, however, to entering on a discussion as to the special

merits and demerits of protoxide of nitrogen as an anæsthetic, a few words on its chemical history may not be out of place.

Nitrous oxide, then, or protoxide of nitrogen (N_2O), is a gas having exactly the same specific gravity as carbonic anhydride (carbonic acid CO_2)—1.52—and of course the same relative weight. It may be prepared in a variety of ways—cheaply by the action of zinc on nitric acid, strengthened by sulphuric acid; more expensively, but in a purer form, by heating the nitrate of ammonia, although even in this way the gas may be contaminated by the presence of other oxygen compounds of nitrogen, or by chlorine compounds resulting from inequalities of temperature during the process of preparation or impurities in the salt. Its taste is pleasantly sweetish, and its chemical properties are almost identical, although somewhat lower in degree, with those of oxygen. One notable exception is its solubility in cold water, which is much greater than that of oxygen, for hot water does not take up so much of the gas as that at a low temperature. These facts are necessary to a true understanding of its effects.

To prepare protoxide of nitrogen for inhalation, then, great care must be taken to preserve its purity; consequently it becomes important to maintain, as nearly as possible, an equal temperature during the process of its manufacture, and, should any nitric oxide be formed, to deoxidize or remove it, which is best done by a solution of ferrous sulphate (sulphate of the protoxide of iron), and washing in water. From what we have said, this washing in water, and keeping the gas for any length of time over water, must be attended with great loss, as much of the gas is thereby absorbed. This may be, to a great extent, avoided by employing water at an elevated temperature, or a strong solution of common salt for the same purpose. When about to be inhaled as an anæsthetic, great care must be taken that no oxygen or air become mixed with the protoxide; otherwise the peculiar effects described by Sir Humphry Davy are observed instead of anæsthesia.

Let us now consider how the gas produces anæsthesia. And here we must confess our indebtedness to some most admirable remarks made at the Medical Society of London on Monday night by Dr. Richardson. When protoxide of nitrogen is inhaled instead of air, there are no longer two gases of very different densities on either side of the pulmonary capillaries, the one in the air-cells of the lung, the other in the blood. Consequently, seeing that nitrous oxide and carbonic acid, having the same density and the same diffusibility, will not change places,[1] carbonic acid will become accumulated in the system to an enormous extent. The small amount of protoxide of nitrogen absorbed having chemical properties almost identical with those of oxygen will, we may suppose—although on this point opinions are divided—hasten the production of carbonic acid, and, consequently, its accumulation. No wonder, then, that anæsthesia, or rather apnœa, rapidly follows. It cannot be too widely understood that protoxide of nitrogen is not *an anæsthetic* in the true sense of the word, but an *asphyxiating agent; that its effects are identical with those of poisoning by carbonic acid gas.* The physical properties of protoxide of nitrogen are those of carbonic acid; its chemical, those of oxygen; and hence it is that it produces anæsthesia. Many men are apt to found their conceptions of poisoning by carbonic acid on the descriptions given of death caused by the fumes of burning charcoal. This is an error. The poisonous agent produced by burning charcoal is really carbonic oxide; the effects observed are characteristic of this gas, and differ essentially from those of carbonic acid. Death from carbonic acid may occur as from the choke damp of coal mines, or the after damp which follows an explosion of fire-damp; or, as has sometimes happened, by men entering brewers' vats before they had been properly ventilated. Thus death may occur as speedily as it does when any small animal is made to inhale protoxide of nitrogen; for that death does so result has been unmistakably proved by Drs. Richardson and Ludimar Herman (see Reichert and Du Bois' *Archiv* for 1864, pp. 521 *et seq.*), the great workers on the subject. Were an animal made to inhale pure hydrogen or nitrogen gas, capable of no vitalizing action

[1] [The writer of this article has entirely misunderstood Dr. Richardson's statement. Dr. R. remarked "that as gases of the same density diffused equally, carbonic acid gas would diffuse into nitrous oxide at the same rate as it would diffuse into itself. The density of the two gases being equal, diffusion would be equal." There are, however, other circumstances to be taken into consideration, which we have not now time to discuss.—Ed. Med. News.]

on the blood, the same results would follow, but in a longer time; for the densities of the gases being smaller than that of carbonic acid, the latter would diffuse outwards, but no oxygen would pass inwards, and consequently the vital processes must ultimately be arrested.

These facts serve to explain the intense lividity of the face of a patient under the influence of nitrous oxide, the dark colour of the blood which flows from any wound made by the surgeon, the slow pulsation and almost complete arrest of the heart's action, as well as the speedy recovery when the gas is no longer inhaled; for, owing to the great quantity of carbonic acid in the blood, it will tend to diffuse rapidly outwards. Hence, also, the great danger of giving protoxide of nitrogen to a patient who has diseased lungs, either the result of pulmonary or cardiac affection, as the intense congestion produced by the gas may give rise to severe subsequent hemorrhage. It will also be seen that the gas cannot be administered to every individual to the production of anæsthesia without great risk of inducing fatal apnœa. This fact will ever be a great bar to its general employment. Nevertheless, Marion Sims speaks of operating on a patient under its influence, when the operation lasted twenty minutes. We can scarcely understand how this could have been, except the mouthpiece of the inhaler had been repeatedly withdrawn during that period. If nitrous oxide is to take its place as a regular anæsthetic, it must be, for the most part, in operations of short duration, as in dentistry, and some branches of ophthalmic surgery. Some of our leading men in these departments already speak highly of it, especially as being followed by no evil subsequent effects, but our experience is hardly so extended as to lead us to accept it without hesitation. For certain surgical operations where complete muscular relaxation is indispensable, nitrous oxide is valueless, and will never take the place of chloroform.

We have made these observations in a calm and temperate spirit. We are very far from being opposed to the introduction of anything likely to benefit our fellow-men, but we have considered it our duty to lay before them the true action of protoxide of nitrogen, that, should they be inclined to adopt it, they may not do so with ignorant rashness. It is an edged tool not to be wantonly tampered with.—*Med. Times and Gaz.*, April 18, 1868.

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Fatal Hemorrhage after Extraction of a Tooth.—Dr. SCHUNEMANN relates an interesting example of this occurrence. Its rarity may be judged of by the fact that it is the only case that has occurred among 9442 tooth extractions performed in the Brunswick Hospital during 1859-66. A molar tooth was easily removed from the jaw of a tailor, 21 years of age, on account of caries. The bleeding, without being great, persisted in spite of astringents, and it was then stated that he, as well as his father and brother, were subjects of hemorrhagic diathesis. In the course of the night, severe bleeding came on, and he was brought to the hospital in an anæmic state, being scarcely conscious and his pulse hardly perceptible. The bleeding still continued, but was at last arrested by a conical cork plug. He was sufficiently recovered at the end of four days to leave the hospital, but having removed the plug next day, profuse bleeding came on again, and it could only be arrested after several applications of the actual cautery. His strength was reduced to the lowest ebb, but by the aid of stimuli he was rallied. At the end of three days, in spite of all warning, he again removed the plug, and the bleeding again recurred, and was arrested at the end of several hours by plugging and cautery. However, the patient's strength was too far gone to rally this time, and he died on the day week that the tooth had been extracted. The autopsy threw no light on the cause of the bleeding.—*Med. Times and Gaz.*, from *Virchow's Archiv.*

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Cause of the Inability of Salt-water Fish to live in Fresh Water, and of Fresh-water Fish to live in Salt Water.—Prof. BERT, of Bordeaux, communicated lately to the Paris Biological Society some of the results of an investigation he is engaged in. Almost all salt-water fish, and especially those which range over great distances, die rapidly on being placed in fresh water, while most fresh-water fish speedily perish when placed in salt water. This is the case not only with fish, but also with crustacea and mollusca, etc. It is true that when the transition is brought about slowly and gradually remarkable examples of tolerance may be observed. This is the case in a

state of nature with regard to the salmon, eel, lamprey, and others, while Beudant and other experimenters have exhibited still more remarkable examples of such tolerance. But in the cases of rapid death to what is this death due? Most probably to the difference in osmotic power between salt and fresh water—a difference which in fish with a uniform surface operates upon the entire body, and on those protected by a cuirass acts especially on the respiratory membranes.

The density of a liquid being generally proportionate to its osmotic power, Prof. Bert has sought, in simply increasing the density of fresh water, by the addition of an inoffensive substance, until it equalled the density of sea water, to ascertain whether it would become less dangerous to salt-water fish. To this end he employed sugar, for solutions of glycerine and especially of gum, made of the necessary strength, rapidly killed the fish. The following are the mean results of a series of experiments: The *Sparus mendola*, placed in vases of the same capacity, died in 86 minutes in fresh water, and in 153 minutes in sugared water. Mullets died in 44 minutes in the one and in 68 in the other. So that, at all events for these descriptions of fish, the action of density is obvious, although it is extremely probable that it is only one of the factors of osmotic power. The Professor hopes to continue his investigations under the auspices of the Scientific Society of Arrachon, which is about to place at the disposal of naturalists aquaria, basins, and laboratories. — *Med. Times and Gaz.*, April 18, 1868.

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Simple Synthesis of Urea.—Professor Kolbe, of Leipzig, who is at present in London, described at the last meeting of the Chemical Society an interesting and wonderfully simple process for the synthesis of urea. All chemists know that each molecule of carbonate of ammonia contains the elements of a molecule of urea *plus* two molecules of water. During the incipient putrefaction of urine, urea actually takes up two molecules of water, according to the well-known formula

$$COH_4N_2+2H_2O=(NH_4)_2CO_3,$$

and is thus converted into carbonate of ammonia. The same change can be effected by heating an aqueous solution of urea to a temperature of 284° Fahr. in a hermetically sealed tube.

Urea, in fact, bears to the carbonate of ammonia the same relation that oxamide does to oxalate of ammonia. Now, when oxalate of ammonia is heated, it loses two molecules of water, and is converted into oxamide; but carbonate of ammonia, when exposed to similar treatment, is simply volatilized instead of being dehydrated. The parallel reaction has, however, at last been effected by Professor Kolbe, and thus this important gap in the history of urea is filled up. The process is very simple. Dry carbonate of ammonia is inclosed in a hermetically sealed glass tube, and heated for some time to a temperature short of that at which urea decomposes. Under these circumstances, the salt behaves like oxalate of ammonia—that is to say, it loses water and becomes converted into the corresponding amide—in other words, into urea. The formula is, of course, precisely the reverse of that given above, but we will vary its form by presenting it in the old notation, which is, even now, more familiar to many of our readers—

$$2(NH_4O,CO_2)=C_2O_2H_4N_2+2H\ O_2.$$

As usual, the thing being done, one is tempted to wonder why so very simple an experiment was never tried before.—*Med. Times and Gaz.*, April 18, 1868.

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Treatment of Disease by Faith and Prayer, instead of Medicine.—In the current number of *Good Words* is an account, by Mr. William Gilbert, of visits paid by him to two of the Continental establishments at which "the treatment of disease by faith and prayer instead of medicine" is carried out systematically.

The institution first visited was that of the Lutheran pastor, Christoph Blumhardt, in the Black Forest; and here Mr. Gilbert found a handsome house, with gardens, etc. —in fact, a bankrupt water-cure establishment converted into a semi-religious house, with the gambling and dancing *salon* turned into a chapel. Here were assembled just that class of valetudinarians who might be met with at any fashionable but quiet resort of invalids, averaging a hundred and sixty in number, who promenaded, attended chapel, took regular meals, and kept early hours, and went away benefited accordingly. A conversation with the pastor

elicited that "he did not deny the efficacy of medicine, but at the same time had a much greater reliance on the efficacy of prayer, being fully convinced from his own experience, which was great, that the majority of diseases could be cured by prayer and faith, without the application of scientific remedies. In surgical cases he did not deny the necessity of calling in a skilful surgeon." Our surgical brethren will feel complimented at this admission, which is not in strict accordance with the views of one of the "peculiar" witnesses at the recent inquest. Mr. Gilbert did not see any cases of cure, nor were there in the institution any persons suffering from serious diseases; he was assured, however, that there had been "some wonderful cases" during the preceding months.

Dorothea Trudel was a young woman who resided at Männedorf, on the banks of Lake Zurich, and who, being of a pious disposition, betook herself to prayer when some members of her family had been given over by the physicians. They recovered, and on sickness again breaking out in the village Dorothea was called in to pray over the sick, who recovered without any medical advice. Unfortunately, medical jealousy appears to have been excited by the reputation she thus obtained, and a prosecution followed, with the imposition of a fine, which, however, was remitted on appeal. Persecution naturally gave publicity, and publicity only increased reputation, so that Dorothea became the rage, and sick folk flocked together from all sides. In the midst of her successes, and in spite of them, Dorothea unfortunately died (in 1862), and her "system" is now carried on by others, with what success we are not informed.—*Lancet*, March 7, 1868.

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A Popular Fallacy.—Dr. E. Symes Thompson, in a recent lecture at Gresham College, very truly remarks: "The public demand from the physician a remedy to cure their complaints without any change or sacrifice on their part. No such remedy exists or will over be discovered. Moderation and self-control in diet will alone eradicate the evil. Colchicum, even in the hands of the unskilled, will relieve the immediate attack; but the sufferer will soon find to his cost, it is an 'edged tool' not to be played with. Medicine, like food, must be used, not abused, and much judgment is needed rightly to use it. Another common fallacy is to suppose that reading a medical book enables a man to treat disease. It is easier for one ignorant of arithmetic and algebra to work out a mathematical problem, than for a man who knows nothing of physiology and pathology to work out a therapeutical one. People have often treated themselves for gout in the stomach, who were really suffering from pork in the stomach! Medical books have, it may be observed, a wonderful effect in making the reader fancy himself a sufferer from the disease described. The early premonitory symptoms of most diseases are vague and indefinite, needing practical experience and scientific knowledge rightly to understand them."—*Med. Times and Gaz.*, Feb. 8, 1868.

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Madame Lachapelle.—In a recent number of the *Wiener Wochenschrift* Dr. Schlesinger gives an amusing account of a visit he paid to the celebrated *accoucheuse* Madame Lachapelle, while at Paris on the occasion of the Exposition. He says that the appellation "midwife," derived from a knowledge of the functions of the German "Hebamme," gives not the slightest idea of those of this famous and much-employed lady. She is at once "*sage femme*," gynæcologist, syphilidologist, and operator for all the lesser evils appertaining to the sex. She is the trusted aid of young women and old husbands, of mothers and daughters who may have mishaps to conceal or repair. Our author, introduced into the midst of a crowd of well-dressed women in the waiting-room, soon made himself at home with them when they learned that he was a "*Frauenarzt*" from Vienna. He contrived, moreover, to make himself agreeable with some of his fair interlocutors by denouncing the cruel and impolitic character of the paragraph of the French code which declares "*toute recherche de la paternité est interdite*," and contrasting it with the provisions of his own happy land, in which the damsel with many lovers is at full liberty to choose a father from among them best able to bring up the forthcoming babe in plenty and comfort, at once sheltering a helpless infant and preventing its becoming a burden either to the mother or society!

Introduced at last into the *salon*, he found it not only furnished with distinguished taste, but also arranged with what he calls a gynæ-

cological refinement and display. On tables and other receptacles lay in picturesque disorder whole batteries of every description of specula, syringes, forceps, hernial bandages, and enema apparatus; these being duly set off by bougies, catheters, caustic holders, dilators, and all the varieties of scalpels, scissors, and other gynæcological instruments. In the background of the apartment stood a large gorgeous sofa supported on gilded legs, and covered with damask and velvet draperies. He found Madame Lachapelle, a woman, although not young, still in the prime of life, of a distinguished and intelligent appearance, and dressed with that exquisite adaptation to her age which seems to be a faculty peculiar to Frenchwomen, and at all events seldom observed in Germany or England. Her first inquiries were as to the position of the German *accoucheuses*, and on learning from her visitor their low and mean position, and the narrow limits within which their functions are confined by law, she expressed herself, as might be expected, with suitable indignation.

Our Doctor was a little unfair, for he obtained his interview by pretexting a desire to consult Madame Lachapelle on a case of sterility which had resisted all medical attempts at relief—this being a class of cases in which she has obtained great celebrity. On the various remedies which had been tried being detailed to her, and among these the rectifying the malposition of the uterus, she expressed the great distrust she felt in these assumed inflections and deflections, which too often only were excuses for prolonged treatment. She held it a pretty strong proof of the correctness of her scepticism that in twenty cases two equally celebrated accoucheurs scarcely agreed in a single one as to the exact diagnosis. We have not space to pursue the amusing conversation which followed, only observing that Madame Lachapelle protested against the habit of invariably attributing the failure of offspring to the woman, while it not unfrequently was really due to the dissipated habits of the man prior to marriage, or some individual peculiarities. She cited even historical illustrations, as that of Louis XVI., who, after an unfruitful cohabitation with a beautiful wife during seven years, yet eventually had five children by her. Then, again, who was at fault in the childless union of Josephine and Napoleon, the one having had two children by a former marriage, and the other one by his second empress?—*Méd. Times and Gaz.*, Mar. 14, '68.

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Insalubrity of Cast Iron Stoves.—In our preceding No., p. 61, will be found a notice of this important subject, and we now learn from an article in the *Lancet*, March 14, 1868, the following further particulars in regard to it:—

"When the attention of the Academy of Sciences of Paris was drawn some time since by M. Carret, one of the physicians of the Hôtel Dieu of Chambery, in several papers, to the possible evil consequences of the use of cast-iron stoves, but little interest was excited in the matter. Recently General Morin has again brought the subject forward with better success. M. Carret does not hesitate to assert most positively that cast-iron stoves are sources of danger to those who habitually employ them. During an epidemic which recently prevailed in Savoy, but upon which M. Carret does not furnish us with any detailed information, he observed that all the inhabitants who were affected with it made use of cast-iron stoves, which had lately been imported into the country, whereas all those who employed other modes of firing, or other sorts of stoves, were left untouched by the disease. An epidemic of typhoid fever, which broke out some time after at the Lyceum of Chambery, was regarded by the same author as being influenced by a large cast-iron stove in the children's dormitory. General Morin speaks in the highest terms of M. Carret's memoirs, to which the recent experiments of MM. Trorat and Deville give additional importance. These able investigators have established that iron and cast-iron when heated to a certain degree become pervious to the passage of gas. They have been enabled to state the quantity of oxide of carbon which may, as they suppose, transude from a given surface of metal, and have shown that the air which surrounds a stove of cast iron is saturated with hydrogen and oxide of carbon. They conclude that cast-iron stoves when sufficiently heated absorb oxygen, and give issue to carbonic acid. General Morin related some comparative experiments which had been performed by M. Carret, and which, he said, corroborate this theory. Thus, after having remained during one full hour in a room heated to 40° (centigrade) by means of a sheet-iron stove,

M. Carret perspired abundantly, got a good appetite, but felt no sickness whatever; he had obtained the same result with an earthenware stove; but the experiment, when performed during only one half hour with a cast-iron stove, had brought on intense headache and sickness. M. Deville, at the same sitting of the Academy, supported these views with considerable warmth. The danger which attended the use of cast-iron stoves, he said, was enormous and truly formidable. In his lecture-room at the Sorbonne he had placed two electric bells, which were set in motion as soon as hydrogen or oxide of carbon was diffused in the room. Well, during his last lecture the two cast-iron stoves had scarcely been lit when the bells began to ring.

"These facts are certainly startling, if we consider the reputation of comparative harmlessness which these articles of domestic use had hitherto enjoyed. In France, particularly, the lodgings of the poorer classes, the barrack-rooms of the soldiery, the artists' studios, the class-rooms of large schools, &c., are commonly heated by this means. Of course, we are inclined to question M. Carret's conclusions; but the apparently accurate character of the facts recorded, joined to the authority of those who have brought them forward, demand for them a serious investigation. We are glad to be able to add that a committee has been appointed by the Academy for the purpose of examining thoroughly into the subject. This committee is composed of MM. Claude Bernard, Morin, Frémy, Deville, and Bussy, and we shall not fail, when the time comes, to mention what shall have been the results of their researches."

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Venom of Toads.—The toad, formerly considered as a creature to be feared, does in reality possess a venom capable of killing certain animals and injuring man. This poison is not, as is generally thought, secreted by the mouth; it is a sort of epidermic cutaneous secretion, which acts powerfully if the skin be abraded at the time of contact. Dogs which bite toads soon give voice to howls of pain. On examination, it is found that the palate and tongue are swollen, and a viscous mucus is exuded. Smaller animals coming under the influence of the venom undergo true narcotic poisoning, soon followed by convulsions and death. Experiments made by MM. Gratiolet, Cloez, and Vulpian, show that the matter exuding from the parotid region of the toad becomes poisonous when introduced into the tissues. A tortoise of the species *Testudo Mauritanica*, lamed in the hind foot, was completely paralyzed at the end of fifteen days; and the paralysis lasted during several months. Some savages in South America use the acid fluid of the cutaneous glands of the toad instead of the curara. The venom exists in somewhat large quantity on the toad's back. Treated with ether, it dissolves, leaving a residuum; the evaporated solution exhibits oleaginous granules. The residuum contains a toxic power sufficiently strong, even after complete desiccation, to kill a small bird.—*British Med. Journ.*, March 28, 1868.

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Scientific Schools in France.—The French Minister of Public Instruction publicly announced at the Sorbonne on Saturday last, that new efforts were about to be made by the government to give an additional impulse to science teaching; that the "budget of science" would be augmented; that laboratories of research and laboratories of instruction would be created, missions instituted for young *savans*, and finally that the position of the professors of the scientific studies would be ameliorated.—*Brit. Med. Journ.*, May 2, 1868.

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Consumption of Tobacco in France.—The French people consume annually, as snuff, 7,699,471 kilogrammes (each kilo. 2 lb. 3 oz. avoird.), representing a colonnade of thirty columns, each equal in size to the column of Vendôme. In smoking there are 18,440,919 kilos. consumed—which, as a compressed mass, would suffice for the construction of the Arc de Triomphe de l'Etoile, together with its foundations. Moreover, there are smoked 28,000 kilos. in cigars at 20 centimes each, measuring in length 638 kilometres, or about the distance from Paris to Bayonne; 63,000 kilos. in cigars at 15 c., measuring 1590 kilometres, or nearly from Paris to St. Petersburg; 178,000 kilos. in cigars at 10 c., measuring 3772 kilometres, or nearly from Paris to Teheran; and 2,734,585 kilos. in cigars at 5 c., measuring 68,360 kilometres, or about twice around the world.—*Med. Times and Gaz.*, April 25, 1868, from *Journ. de Statistique*, Feb.

Sir J. Y. Simpson on the Pyramids.—It is characteristic of the brilliant and diversified gifts of the great Northern Professor that he should have taken in hand the demolition of a curious notion about the Great Pyramid of Egypt, which has been promulgated by Professor Piazzi Smyth, and has found favour with many religious persons. That notion is, that the Pyramid was constructed under Divine guidance to show to all time a correct standard of weight and measure, and that the coffer contained in the central chamber is an inspired measure of capacity, and the base of the Pyramid an inspired measure of length, having a definite relation to the earth's polar axis. Sir James Simpson shows, in a paper read before the Royal Society of Edinburgh, that the Pyramid has all the characters of the huge sepulchral monuments scattered over the earth; that the coffer in its King's Chamber was a sarcophagus; that it contained a body till despoiled by the Caliph El Manoon, about 1000 years ago; that it is irregular in form; incapable of being exactly measured, and hence no standard of measure. In fact, any one who desires a treat in seeing how a thorough "craze" is melted away before common sense, should read Professor Simpson's paper. The kind of argument of Professor Piazzi Smyth to show that the Pyramid was built by Noah is one which we thought peculiar to the medical profession: Noah was a preacher of righteousness; a just system of weights and measures is righteous; *ergo*, Noah built the Pyramid.—*Med. Times and Gaz.*, March 28, 1868.

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What is Syphilization.—M. Langlebert gives the following aphoristic reply to this query: "Syphilization is the art of giving syphilis to those who have not got it, to recall it in those who no longer have it, and to eternize it in those who have it." *Presse Belge*, March 15.

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Accidents.—A somewhat startling statement is made in the report of the Accident Assurance Company, that 2,000,000 of persons, or one in every ten of the population, receive injury every year from accidents of a more or less serious character. Of these, 10,000 are killed, or die from the direct effects of the accident. The total amount paid in claims by this company is £250,000 since 1849. This is striking evidence of the advantage reaped by the public in making provision against those casualties to which all are more or less liable.—*Brit. Med. Journ.*, May 2, 1868.

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New Medical Journal.—The first number of *The Practitioner*, a monthly journal of therapeutics, will appear on the 1st of July next. It will be edited by Dr. Anstie and Dr. Henry Lawson, and published by Macmillan & Co., and is intended as a special medium of intercommunication of ideas respecting the action of remedies. The contents will consist of short original articles, a *résumé* of the more interesting modes of treatment recorded in the foreign journals, a sketch of the experience of London hospitals, and a department for notes and queries. We wish it every success.—*Lancet*, May 2, 1868.

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Safety of Dr. Livingstone.—We are very happy to be able to state that letters from Dr. Kirk have been received in town this day (Wednesday), announcing that autograph letters from Dr. Livingstone have been received from the Sources of the Nile, eight hundred miles from the place where he was alleged to have been murdered.—*Brit. Med. Journal*, April 11, 1868.

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M. Nélaton.—It is said that this eminent surgeon has gone to Stockholm to operate on Baron de Hœpner, the Grand Marshal of the Swedish court, for a tumour. The fee offered is twenty thousand dollars and all his expenses to be paid.

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Sir James Clark.—This eminent physician has had a severe attack of bronchitis accompanied with great prostration and feebleness of heart consequent on his advanced age. He was at the latest accounts, we are happy to say, making progress towards recovery.

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Obituary Record.—Died, at Vienna, on the 25th of Feb. last, of exanthematous typhus, Dr. Ludwig Turck, aged 58. Dr. T. contributed largely to make known the use of the laryngoscope in diagnosis.

The School of Medicine of Paris has just suffered a severe loss by the death, on the 22d of April, of M. Jargavay, the successor of Nélaton as Professor of Clinical Surgery, and a man of eminent abilities.

THOMAS ON DISEASES OF WOMEN—Just Issued.

A PRACTICAL TREATISE ON THE DISEASES OF WOMEN. By T. GAILLARD THOMAS, M. D., Prof. of Obstetrics, &c., in the College of Physicians and Surgeons, N. Y.; late President of the N. Y. Obstetrical Society, &c. In one large and handsome octavo volume of 625 pages, with 219 illustrations on wood; extra cloth, $5; leather, $6.

The best text-book for students, and a perfect *vade mecum* to the gynecologist.—*N. Y. Journal of Obstetrics*, May, 1868.

We have recently been almost flooded by works from American sources, on the allied subjects of obstetrics and gynecology. Nor has quantity alone been the most noticeable feature connected with them, for their quality has invariably been of the highest. Dr. Thomas' work is no exception to this rule; it is preëminently sound and practical, evincing much research and great clinical experience. It is, further, illustrated by upwards of two hundred engravings, some of them of great value.—*London Med. Times and Gazette*, April 25, 1868.

Of all those which have recently appeared, we have seen none more worthy of favorable notice than this new and elegant work by Prof. Thomas. The style and arrangement of the text are fresh, well condensed, and readable. What we particularly note, however, is the large amount of new suggestions in the therapeutics of the subject, that our author has carefully collated and presented to the reader.—*Cincinnati Lancet*, May, 1868.

The book of Prof. Thomas is well calculated to do away with this latter objection, and to accomplish more towards the establishment of a rational system of uterine therapeutics than any other work of its size in any language. We have rarely read any treatise upon a medical topic that has given us better satisfaction, or impressed us with the fitness of an author for the proper performance of a most responsible task. It is perhaps unnecessary for us to commend the work most heartily to every one who is or may be liable to treat uterine diseases.—*N. Y. Medical Record*, April 15, 1868.

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